

AMENDMENTS TO THE CLAIMS

Please replace the claims, including all prior versions, with the listing of claims below.

Listing of Claims:

1. (Currently amended) ~~Method~~A method for fabricating a trench isolation structure, comprising ~~the following steps:~~
~~Forming~~forming a mask-(3) on a substrate-(1);
~~Forming~~forming at least one trench (2)-in the substrate-(1) by ~~means of~~fusing the mask-(3);
~~Carrying out selective deposition of~~selectively growing a first insulation material in the trench(5)-to at least partially fill the at least one trench (2)-in the substrate-(1) with the insulation material (5)-in the presence of the mask-(3); and
applying a second insulation material (6)-over ~~the an~~an entire surface of the structure ~~in order~~ to fill the at least one trench (2)-in the substrate-(1) at least up to ~~the a~~the top side of the mask-(3).
2. (Currently amended) ~~Method~~The method for fabricating a trench isolation structure according to Claim 1, ~~characterized in that~~wherein the substrate (1)-is made from silicon, the mask is made from silicon nitride and the first and second insulation materials-(5,6) are formed from silicon oxide.
3. (Currently amended) ~~Method~~The method for fabricating a trench isolation structure according to Claim 1, ~~characterized in that following~~wherein after the selective deposition a conditioning ~~step~~process is carried out ~~in order~~ to compact the first insulation material-(5).
4. (Currently amended) ~~Method~~The method for fabricating a trench isolation structure according to Claim 1 ~~characterized in that~~1, wherein the second insulation material (6)-is applied by ~~means of an HDP process ("High Density Plasma" process), preferably in the same process tool.~~

5. (Currently amended) ~~Method~~The method for fabricating a trench isolation structure according to claim 1, ~~characterized in that~~wherein the second insulation material (6) is planarized by chemical mechanical polishing (CMP) on the mask (3).